

Docket No. 740819-1086  
Serial No. 10/507,074  
Page 4

### REMARKS

The Official Action dated July 9, 2007 has been received and its contents carefully noted. In view thereof, claims 4-11 have been canceled in their entirety without prejudice nor disclaimer of the subject matter set forth therein while claims 1, 2 and 3 have been amended in order to better define that which Applicants regard as the invention. Accordingly, 1-3 are presently pending in the instant application.

With reference now to the Official Action and particularly page 2 thereof, the Examiner has noted that Fig. 11 should be designated with the legend such as "Prior Art" because only that which is old is illustrated. In this regard, filed concurrently herewith is a Submission of Substitute Formal Drawings wherein Fig. 11 has been amended to include the legend Prior Art. Accordingly, it is respectfully submitted that Applicants' several figures are now in proper formal condition for allowance.

In paragraph 2 of the Office Action, the claims have been objected to as including reference characters corresponding to elements recited in the detailed description of the drawings and used in conjunction with the recitation of the same element or group of elements in the claims which should be deleted so as to avoid confusion with other numbers or characters which may appear in the claims. In this regard, as can be seen from the foregoing amendments each of claims 1, 2 and 3 have been amended in order to delete the reference characters set forth therein. Accordingly, it is respectfully submitted that such claims are now in proper formal condition for allowance.

With reference now to paragraphs 4 and 6 of the Office Action, claims 1, 2 and 4-11 have been rejected under 35 U.S.C. §102(b) as being anticipated by German Patent Publication 40 18 311 to Leifeld, while claim 3 has been rejected under 35 U.S.C. §103(a) as being unpatentable over Leifeld in view of U.S. Patent No. 3,924,396 issued to Bobkowicz et

Docket No. 740819-1086  
Serial No. 10/507,074  
Page 5

al. Each of these rejections are respectfully traversed in that Leifeld when taken alone or in view of the teachings of Bobkowicz et al. neither discloses nor suggests that which is presently set forth by Applicants' claimed invention.

Initially, with respect to claims 4-11, as can be seen from the forgoing amendments, such claims have been canceled and consequently further discussion with respect thereto is no longer believed to be warranted.

With respect to pending claims 1-3, as can be seen from the foregoing amendments, independent claim 1 has been amended to recite a needle blade roll for use in an artificial cotton fabrication apparatus which fabricates artificial cotton by forming from a material capable of formation of artificial cotton a large number of short fibers ranging in fiber length between 1 and 200 mm and by accumulating said short fibers, said needle blade roll being mounted rotatably in a cylindrical casing in order that a large number of short fibers can be formed from said material, wherein said needle blade roll comprises a roll main body and a large number of needle blades implanted into a peripheral surface of said roll main body and wherein each said needle blade is arranged at a sloping angle relative to an associated radial line of said roll main body so that its leading end lies ahead of said radial line with respect to the rotational direction of said roll main body. A clearance (C) is formed between the leading ends of the needle blades and an internal peripheral surface of the casing falls in a range of 15µm and 500µm and the material capable of formation of artificial cotton of the artificial cotton fabricating apparatus comprises a uniaxial drawn substance of polytetrafluoroethylene and/or an ethylene/tetrafluoroethylene copolymer. It is respectfully submitted that the patent publication to Leifeld when taken alone or in view of the teachings of Bobkowicz et al. neither discloses nor suggests that which is presently set forth by Applicants' claimed invention.

Docket No. 740819-1086

Serial No. 10/507,074

Page 6

In reviewing the teachings of Leifeld, it is noted that this reference discloses a technique for raveling a mass of short fibers. Contrary to such a teaching, the present invention relates to a needle blade roll for producing a large number of short fibers by rubbing and chopping a film (a uniaxial drawn substance comprising fluoropolymer resin), which is significantly different from that set forth by Leifeld. In accordance with Applicants' claimed invention, a clearance is provided between the leading ends of the needle blades and an internal peripheral surface of the casing with this clearance falling within a preferred range, while Leifeld is concerned with a device to ravel fiber aggregation and does not disclose or remotely suggest the technique of chopping a sheet like material as is the case with Applicants' claimed invention.

If the material of the present invention, that being a uniaxial drawn substance comprising fluoropolymer resin, is rubbed and opened by the large clearance disclosed in Leifeld, the material would be rippled by such an action during the rubbing and as a result the material would be merely cut. On the other hand, in accordance with Applicants' claimed invention having a specified clearance with respect to a uniaxial drawn substance of fluoropolymer resin having a sheet shape, the resultant product in accordance with Applicants' claimed invention can be rubbed and chopped with the needle blade resulting a suitable artificial cotton. Accordingly, in that the patent to Leifeld when taken alone or in view of the teachings of Bobkowicz et al. neither discloses nor remotely suggests a device including a clearance between the leading ends of the needle blades and an internal peripheral surface of the casing falling within the range of 50 $\mu$ m to 500 $\mu$ m, it is respectfully submitted that Applicants' claimed invention as set forth in independent claim 1, which recites such clearance, is in proper condition for allowance.

Docket No. 740819-1086

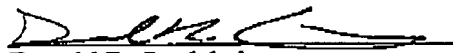
Serial No. 10/507,074

Page 7

Therefore, in view of the foregoing it is respectfully requested that the objections and rejections of record be reconsidered and withdrawn by the Examiner, that claims 1-3 be allowed and that the application be passed to issue.

Should the Examiner believe a conference would be of benefit in expediting the prosecution of the instant application, he is hereby invited to telephone counsel to arrange such a conference.

Respectfully submitted,



Donald R. Studebaker

Reg. No. 32,815

Nixon Peabody LLP  
401 9<sup>th</sup> Street N.W.  
Suite 900  
Washington, D. C. 20004  
(202) 585-8000